

**VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY MONITORING NETWORK CHANGES  
JULY 2008 to JUNE 2009**

**INSTRUMENTATION CHANGES SINCE LAST REVIEW**

**51-087-0014, 72-M, MathScience Innovation Center, Henrico County, AQCR5**

The Urban Air Toxics Site at the MathScience Innovation Center in eastern Henrico County has been upgraded to a fully functioning NATTS site. The Effective date of the change was November 1, 2008. The change involved replacing the monitoring shelter, adding PAH sampling and Chromium VI sampling, and placing a low flow PM-10 monitor. The MSIC site has also been upgraded to a monitoring research station allow AQM to study TSP/PM10 scaling factors for lead.

**51-670-0010, 154-M, Carter Woodson Middle School, Hopewell Virginia, AQCR5**

The Carter Woodson site was established as an upwind site for the Hopewell air toxics special study. The study ended September 30, 2008 but the Carter Woodson site will be continued as a permanent Urban Air Toxics site. The site will monitor for VOC's, Carbonyls, Metals and a PM10 FRM monitor has been placed at this site as well. The official start date of this site was November 1, 2008.

**51-033-0001, 48-A, U.S.G.S. Geomagnetic Center, Corbin, Caroline County**

The Auto GC has been moved from the MSIC site in Henrico County to the site at Corbin in Caroline county. The Corbin site is a type II PAMS site so the auto GC will be used in place of Canister sampling for VOC's. In addition to the VOC's, Corbin will house a 1/6 day sampler for TO-12 Analysis and the NOy analysis for the PAMS program. This site will officially start up on June 1, 2009. The site continues to house an Ozone monitor as well.

**51-775-0011, 110-C, Salem High School, City of Salem, AQCR2**

VA DEQ installed a PM2.5 FRM monitor at Salem High School in Salem, Virginia as a replacement for the existing PM2.5 at Raleigh Court Library. The data comparison between Raleigh Court and the PM2.5 monitor at Round Hill Montessori indicated no significant difference between the 2 data sets. This change was also in response to a citizen request for evaluation of the data and consideration of placing a monitor in the Salem area.

**51-770-0014, 109-L, Raleigh Court Library, Roanoke, AQCR2**

This monitor was removed as part of the relocation of the PM2.5 monitor to Salem High School.

**51-100-0013, 179-C, SCOT Facility NN public schools, Newport News, AQCR6**

This monitoring site is the replacement for the Hampton site (see below) which was closed due to shutdown of the host facility. The monitors placed at this site are exactly the same as the monitors formerly located at Hampton.

**51-650-0004, 179-C, Virginia School for the Deaf and Blind, Hampton Virginia, AQCR6**

In summer 2008, Virginia DEQ was notified that the Virginia School would be shut down, effective July 1, 2009. This change would lead to a shutdown of all power to the Virginia School location. This site was replaced by the Newport News Site described above.

**51-069-0012, 28-L, Clearbrook Fire Station, Frederick County, AQCR2**

In January, 2009 this PM-10 HI VOL monitor was removed due to redundancy with the 51-840-0002, Winchester Courts building PM-10 SLAMS monitor.

**ANTICIPATED INSTRUMENTATION CHANGES**

**51-xxx-xxxx, PM2.5 Monitor in Alexandria City (AQS and monitor number to be determined)**

VA DEQ may evaluate the installation of a PM2.5 monitor within the limits of the City of Alexandria. There are currently 2 monitor locations active in the City. DEQ will include in the evaluation the possibility that the new monitor(s) will be sited initially as special purpose

monitor(s) with the possibility of including the FRM monitor in the overall region-wide PM2.5 network subject to evaluation of the collected data.

**51-087-0014, 72-M, MathScience Innovation Center, Henrico County, AQCR5**

In addition to hosting the NATTS site, the MSIC site will also be the NCore site location for Virginia. Currently there are monitors established at the site for NOy, PM2.5 FRM, PM10 LO VOL, and PM10 Coarse. A meteorological station is planned for summer 2009 and CO trace and SO2 trace monitors for fall 2009. The site is currently being used for NOy comparison to NOx data and for developing PM coarse background data.

**51-027-xxxx, Jewell Coke Source specific Lead Monitor, Buchanan County, AQCR1**

This is one of 3 anticipated source specific monitors that will be placed prior to January 1, 2010.

**51-770-xxxx, Roanoke Electric Steel Source specific Lead Monitor, City of Roanoke, AQCR2**

This is one of 3 anticipated source specific monitors that will be placed prior to January 1, 2010.

**51-069-xxxx, GE Winchester Lamp Source specific Lead Monitor, Frederick County, AQCR2**

This is one of 3 anticipated source specific monitors that will be placed prior to January 1, 2010.

#### **ANTICIPATED SITE CHANGES**

**51-770-0011, 109-H, Cherry Hill Subdivision, City of Roanoke, AQCR2**

In anticipation of the addition of the TSP Lead Monitor for Roanoke Electric Steel, DEQ will evaluate the location of this monitor as well. It is likely that the monitors will be located in the same place. Relocation of this site may occur depending on the results of the Lead modeling.

**51-087-0014, 72-M, MathScience Innovation Center, Henrico County, AQCR5**

In anticipation of the additional monitors being placed at this site and to be consistent with projected priorities of the draft National Ambient Air Monitoring Strategy, the PAMS site at the MSIC in Henrico County will be discontinued. The site was a Type II b site and was to provide upwind information for the Washington D. C. area. The combination of the Corbin Type II site and the MacMillan site, maintained by the D. C. Department of the Environment, will meet the regulatory requirements for PAMS sites at serious non-attainment areas.

#### **OTHER**

**51-059-1005, L-46-C1, Mason Governmental Center, Fairfax County, AQCR7**

**51-059-5001, L-46-A8, McLean Governmental Center, Fairfax County, AQCR7**

**51-059-0005, L-46-F, Chantilly, Fairfax County, AQCR7**

The possibility exists that the Fairfax Health Department, Division of Environmental Services could be impacted by potential budget cuts anticipated for the Fiscal Year beginning July 1, 2009. DEQ will respond by rationalizing the monitoring network once we are certain as to the level of reductions the Fairfax County Board of Supervisors is planning to implement.

#### **HOPEWELL SPECIAL TOXICS STUDY:**

VA DEQ set up three sampling sites for an Air Toxics Study in the City of Hopewell and nearby environs. This is a two-year special study ended September 30, 2008. The monitoring involved sampling for Volatile Organic Compounds (VOCs), PM10 Metals, Hexavalent Chromium, Black Carbon, Carbonyls and meteorological instrumentation. Upon completion of the study, VA DEQ made the following changes:

**51-670-0010, 154-M, Carter G. Woodson Middle School, Hopewell – Upwind site.**

This site has been converted to a permanent Urban Air Toxics site. This site is also be used for a SLAMS PM10 HI VOL monitor. Meteorological data is also collected.

**51-670-0011, 154-N, Spruance Road, Hopewell – Central site.**

**Sampling has been reduced at the Spruance road site to only VOC's as a means of continuing to analyze for Acrolein. The site is also being used to gather PAH data to demonstrate DCLS capability to perform these analyses. We have also installed a continuous TRS meeting to investigate the existing of H2S concentrations above the odor threshold.**

**51-036-0003, 75-C, Virginia Commonwealth University Rice center, Charles City County–  
Downwind site**

**This site was shutdown effective October 8, 2008.**

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